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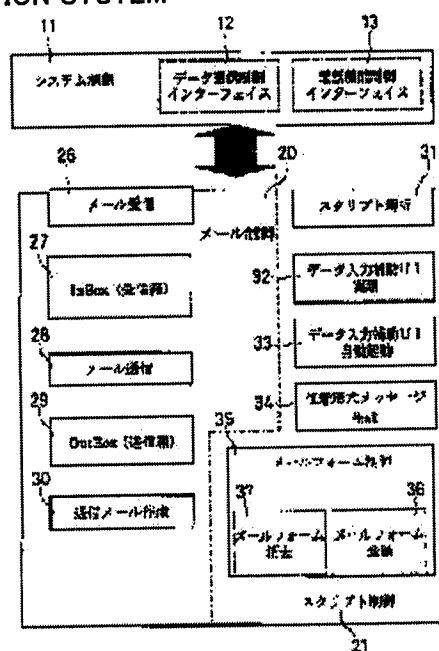
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(54) COMMUNICATION EQUIPMENT AND COMMUNICATION SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a communication equipment capable of easily inputting data and transmitting data considering of the data format of a server and a communication system provided with the communication equipment and a server capable of easily preparing return data at the time of receiving data from the communication equipment.

SOLUTION: A telephone set to be a communication equipment analyzes a script received from a server by a script analysis part 31 and executes the script by a data input aiding UI realization part 32 to realize a specific input aiding function. An optional format message generation part 34 prepares data of a format corresponding to the server from data inputted by the aiding function and the prepared data are transmitted. The server receives the data, prepares answer data and transmits the answer data. The input aiding function uses a form tag defined adaptively to the prescribed format. The prescribed format is a format to be utilized for a WWW system and constituted of a text and an image defined by extending it by a script of a browser language.



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CLAIMS

[Claim(s)]

[Claim 1]A communication apparatus which communicates with a server, comprising:

A means to realize a specific input auxiliary function.

A means to create data of form according to a server from data inputted by a realized input auxiliary function.

A means to transmit created data.

[Claim 2]Realize said input auxiliary function realization means, and an input auxiliary function using FOMUDAGU defined as a predetermined form by being adapted with said predetermined form. The communication apparatus according to claim 1 being the form which comprises a text which is used by a WWW (World Wide Web) system, is extended and is defined by script of a browser language, and a picture.

[Claim 3]The communication apparatus according to claim 1 or 2 containing a means to receive reply data from a server which answered data receiving from the communication apparatus concerned.

[Claim 4]Said communication apparatus, including further a means to receive a script for realizing an input auxiliary function from a server, and a means to analyze a received script said input auxiliary function realization means, The communication apparatus according to claim 2 realizing an input auxiliary function based on an analysis result of said analysis means.

[Claim 5]A means to store two or more scripts for said communication apparatus to realize an input auxiliary function, The communication apparatus according to claim 4, wherein said input auxiliary function realization means realizes an input auxiliary function in a script selected by said selecting means, including further a means to choose any one of two or more stored scripts.

[Claim 6]The communication apparatus according to claim 5 containing a means to eliminate a script stored in said storing means.

[Claim 7]The communication apparatus according to claim 4 including a control means which starts said analysis means and an input auxiliary function realization means, and realizes an input auxiliary function automatically when a script is received by said reception means.

[Claim 8]A step which realizes a specific input auxiliary function to a computer of a communication apparatus which communicates with a server, A medium which recorded a communication processing program for performing a step which creates data of form according to a server from data inputted by a realized input auxiliary function, and a step which transmits created data.

[Claim 9]In a communications system which it has, a communication apparatus and a server a communication apparatus, Create data of form according to a server from data which realized a specific input auxiliary function and was inputted by a realized input auxiliary function, transmit to a server and a server, A communications system analyzing received data at the time of data receiving from a communication apparatus, and creating and replying data of form according to a communication apparatus.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention]This invention relates to a communications system provided with a communication apparatus and a server, concerning communication apparatus, such as a portable telephone set in which electronic mail communication is possible.

[0002]

[Description of the Prior Art]The communication apparatus of conventional technology is not provided with a means to analyze and perform the script of browser languages, such as HTML (Hyper TextMarkup Language) used with a WWW system. Therefore, the script which carried out e-mail reception from the server will be displayed as it is, for example.

[0003]In a WWW system, a browser is actually materialized in response to directions with a HTML tag. The auxiliary function of the data input in a request to print out files of an airline ticket, the prearranged accommodation of a hotel, a purchase application request to print out files (on-line shopping) of goods, etc. is realized by this now. For example, a check button, a check box, and a character input box are realized, and an operator chooses these buttons or inputs data into a box. moreover — an input guidance etc. are displayed by a picture and graphics — visual — input assistance — ** — **. According to such an input auxiliary function, when an operator is unfamiliar to information management systems, such as a personal computer, data input can be performed easily.

[0004]However, since the communication apparatus of conventional technology is not provided with the means of the browser which analyzes and performs a script as mentioned above, the above-mentioned input auxiliary function is unrealizable. Therefore, looking at unclear display information, if an operator does not input the data of a plain text by complicated operation, it does not change.

[0005]On the other hand, the relation condition which matched the processing which should be performed is beforehand set to JP,9-223087,A, and when an incoming message agrees in relation condition, the message processing method and system which perform processing matched with relation condition are indicated. Here, said relation condition is set up in a server, and a server judges said condition agreement at the time of the message reception from a communication apparatus, and operates according to a decision result. In the communications system of such conventional technology, a communication apparatus does not create an outgoing message in consideration of the data format of a server, and at the time of the message reception from a communication apparatus, in consideration of this communication apparatus, a server creates an answer message and does not transmit. Therefore, when requiring a reply to the message which received from the communication apparatus, creation operation of the answer message in a server becomes complicated.

[0006]

[Problem(s) to be Solved by the Invention]The purpose of this invention is to provide a communications system provided with the communication apparatus which transmits the data in consideration of the data format of the server and such a communication apparatus, and the server which creates reply data easily to the data receiving from this device. Other purposes of this invention are to provide the communication apparatus which can input data easily.

[0007]

[Means for Solving the Problem]A communication apparatus whose this invention is characterized by that a communication apparatus comprises the following and which communicates with a server.

A means to realize a specific input auxiliary function.

A means to create data of form according to a server from data inputted by a realized input auxiliary function.

A means to transmit created data.

[0008]If this invention is followed, in a communication apparatus, data will be inputted by a realized specific input auxiliary function. Data of form according to a server is created from inputted data. Created data is transmitted to a server. Thus, since a communication apparatus transmits data of form according to a server, in a server which received such data, reply data to received data can be created easily.

[0009]This invention said input auxiliary function realization means, An input auxiliary function using FOMUDAGU defined as a predetermined form by being adapted is realized, and it is characterized by said predetermined form being a form which comprises a text which is used by a WWW (WorldWide Web) system, is extended and is defined by script of a browser language, and a picture.

[0010]If this invention is followed, in a communication apparatus, an input auxiliary function which was mentioned above will be realized, for example, a check button, a check box, and a character input box will be realized. an operator chose these buttons and inputted data into a box — it can carry out and data can be inputted easily. An input guidance etc. are displayed by a picture and graphics. The operator can input data easily gaining support by this display. Therefore, even if it is when an operator is unfamiliar to an information management system, data can be inputted easily.

[0011]This invention contains a means to receive reply data from a server which answered data receiving from the communication apparatus concerned.

[0012]If this invention is followed, a communication apparatus will receive data which answered data receiving from this communication apparatus, and a server replied. Therefore, a communications system of a communication apparatus and a server is realizable.

[0013]Said input auxiliary function realization means realizes an input auxiliary function based on an analysis result of said analysis means, including further a means by which this invention receives a script for said communication apparatus to realize an input auxiliary function from a server, and a means to analyze a script in which it was received.

[0014]If this invention is followed, a communication apparatus which received a script from a server will analyze this script, and will realize an input auxiliary function using FOMUDAGU defined as a predetermined form by being adapted based on an analysis result. Said predetermined form is a form which comprises a text which is used with a WWW system, is extended and is defined by script of a browser language, and a picture. Therefore, the operator can input data easily.

[0015]A means by which this invention stores two or more scripts for said communication apparatus to realize an input auxiliary function, Said input auxiliary function realization means realizes an input auxiliary function in a script selected by said selecting means, including further a means to choose any one of two or more stored scripts.

[0016]If this invention is followed, a communication apparatus will store two or more scripts from a server, will perform one of them selectively, and will realize an input auxiliary function. A script stored is data for realizing an input auxiliary function which was adapted for conditions, such as a request to print out files of an airline ticket, prearranged accommodation of a hotel, and a purchase application request to print out files (on-line shopping) of goods, respectively, for example. [two or more] Therefore, a function which an operator in two or more input auxiliary functions desires can be realized selectively, and high convenience is acquired.

[0017]This invention contains a means to eliminate a script stored in said storing means.

[0018]If this invention is followed, two or more scripts stored in a communication apparatus are eliminable. Therefore, an unnecessary script can be eliminated and a storage capacity can be used effectively. It can prevent making a mistake in an unnecessary input auxiliary function, and

realizing by eliminating an unnecessary script.

[0019]This invention includes a control means which starts said analysis means and an input auxiliary function realization means, and realizes an input auxiliary function automatically, when a script is received by said reception means.

[0020]Since an input auxiliary function will be automatically realized if a communication apparatus receives a script if this invention is followed, it is not necessary to give directions of realization of an input auxiliary function, and, as for an operator, high convenience is acquired.

[0021]This invention receives a computer of a communication apparatus which communicates with a server. It is the medium which recorded a communication processing program for performing a step which creates data of form according to a server from a step which realizes a specific input auxiliary function, and data inputted by a realized input auxiliary function, and a step which transmits created data.

[0022]If this invention is followed, a communication apparatus which operates as mentioned above is realizable by reading and performing said recording medium by computer of a communication apparatus.

[0023]This invention a communication apparatus and a server in a communications system which it has a communication apparatus, Create data of form according to a server from data which realized a specific input auxiliary function and was inputted by a realized input auxiliary function, transmit to a server and a server, It is a communications system analyzing received data at the time of data receiving from a communication apparatus, and creating and replying data of form according to a communication apparatus.

[0024]If this invention is followed, from data inputted by a realized specific input auxiliary function, a communication apparatus will create data of form according to a server, and will transmit to a server. A server which received data from a communication apparatus analyzes this received data, and creates and replies data of form according to a communication apparatus. Since said communication apparatus transmits data in consideration of a data format of a server, the server can create reply data easily to data receiving from said communication apparatus, and can provide such a communications system.

[0025]

[Embodiment of the Invention]Drawing 1 is a figure showing the communications system which is one gestalt of operation of this invention. This communications system is a communications system of an E-mail, and comprises the portable telephone 1 in which radio is possible, the wireless public network 2, the client mail server 3, the network 4, and the mail service server 5. The client mail server 3 and the mail service server 5 transmit [the client mail server 3 which performs mail administration of the telephone 1 and this telephone 1] via the wireless public network 2 and receive an E-mail via the networks 4, such as the Internet, respectively.

[0026]Drawing 2 is a block diagram of the telephone 1. Operation of the whole is controlled by the system control part 11 in which the telephone 1 has the data-communication-control interface part 12 and the telephone function control-interface part 13. The memory 23, the input part 24, and the indicator 25 for managing a telephone and the data communication part 14, the telephone function control section 19, the e-mail control section 20, the cell 22 for a drive, and a variety of information are connected to the system control part 11.

[0027]By the antenna 16 connected to a telephone and the electric wave communications department 15 of the data communication part 14, the electric wave of the data signal for the audio signal for a telephone call and mail communication is transmitted and received. A telephone and the data communication part 14 control data communications a telephone function and at large, and especially the electric wave communications department 15 controls transmission and reception of said electric wave. The audio signals which the audio signal received at the time of a telephone call is sound-ized by the receiver 17 connected to this communications department 14, and is outputted, and are transmitted are collected by the transmitter 18 connected to the communications department 14. The data-communication-control interface 12 of the system control part 11 is an interface between a telephone and the data communication part 14, and the system control part 11.

[0028]The telephone function control section 19 controls the operation about a stop and resumption of a talking function. The telephone function control interface 13 of the system

control part 11 is an interface between the telephone function control section 19 and the system control part 11.

[0029]The e-mail control section 20 controls operation of mail administration. The e-mail control section 20 has the script control section 21, in order to realize operation peculiar to this invention. This script control section 21 controls the script contained in e-mail.

[0030]Here, said SUPURIKUTO is data for realizing a specific input auxiliary function. For example, an input auxiliary function is an input auxiliary function using FOMUDAGU defined as a predetermined form by being adapted, and said predetermined form is a form which comprises a text which is used with a WWW system, is extended and is defined by the script of browser languages, such as HTML, and a picture.

[0031]The cell 22 for a drive is a power source of the telephone 1. The memory 23 memorizes various data and system management data. The input part 24 is provided with a key, a touch panel, and an input pen, for example, and performs various alter operation. The indicator 25 is realized by the liquid crystal display, for example.

[0032]Drawing 3 is a block diagram of the e-mail control section 20. The e-mail control section 20 has the e-mail receive section 26, the InBOX section 27, the mail sending part 28, the OutBox section 29, and the transmitting mail preparing part 30 other than said script control section 21. The script control section 21 has the script-analysis part 31, the data input auxiliary user interface (UI) implementation part 32, the data input auxiliary UI automatic start part 33, the optional form message creating section 34, and the mail form control section 35. The mail form control section 35 has the mail form registering part 36 and the mail form erasing part 37.

[0033]Reception mail is given and saved by the e-mail receive section 26 in the InBOX section 27 at the time of e-mail reception. The mail which was created by the transmitting mail preparing part 30, and was saved in the OutBox section 29 is outputted by the mail sending part 28 at the time of transmitting mail.

[0034]The script-analysis part 31 judges whether a script is contained in the received mail. The data input auxiliary UI implementation part 32 realizes in a script the interface with which data input is assisted. The data input auxiliary UI automatic start part 33 realizes automatically the interface with which data input is assisted at the time of the e-mail reception containing a script. The optional form message creating section 34 generates the message of optional form, i.e., the form according to the server 5, from the data inputted by the realized data input auxiliary interface.

[0035]The mail form control section 35 controls the mail form of the script for realizing an input auxiliary function. Mail form is registered into the mail form registering part 36, and two or more mail forms are specifically registered. If any one of two or more mail forms is chosen, the script of the selected mail form will be performed and said input auxiliary function will be realized. The mail form erasing part 37 eliminates the mail form registered into the registering part 36. For example, any one of two or more mail forms is eliminated selectively.

[0036]Drawing 4 is a perspective view showing the appearance of the telephone 1. The telephone 1 has the input display surface 38. On the display surface of said indicator 25, the input display surface 38 laminates the input screen which has the translucency of said input part 24, and is constituted. The area 39 which displays a battery exhaustion state, the handwritten input area 40, the keystroke area 41, etc. are established in the input display surface 38. Data is inputted into this input display surface 38 using the input pen 42. Said input display surface 38 is protected by the panel 47 provided in the housing of the telephone 1 so that opening and closing were possible. The telephone 1 has the call start key 43, the end of a telephone call / power key 44, and the switch 45 in relation to the input part 24, and has the light emitting diode 46 in relation to the indicator 25.

[0037]Drawing 5 is a block diagram of the client mail server 3. The client mail server 3, It has I/O control unit 54 which manages input and output of the mail server supervisory control part 51 which controls operation of the whole, the storage parts store 52 which memorizes collectively and manages a variety of information, the transceiver person Management Department 53 which manages the e-mail transceiver person to the client mail server 3, and mail.

[0038]Drawing 6 is a block diagram of the mail service server 5. The mail service server 5 has the mail server supervisory control part 61, the script message creating section 62, the reply

mail preparing part 63, the storage parts store 64, the message analysis section 65, the transceiver person Management Department 66, and I/O control unit 67.

[0039]The mail server supervisory control part 61 controls operation of the whole server 5. The message analysis section 65 judges whether the received mail is analyzed and the message of optional form, i.e., the form according to the server 5, is contained. A decision result is given to the mail server supervisory control part 61. The script message creating section 62 is a case where the message of form according to the server 5 is contained in the received mail, and to reception mail, when a reply is required, it generates a SUPURIKUTO message. The reply mail preparing part 63 creates the E-mail for transmitting the created SUPURIKUTO message as transmitting mail. The storage parts store 64 memorizes collectively and manages a variety of information. The transceiver person Management Department 66 manages the e-mail transceiver person to the mail service server 5. I/O control unit 67 manages input and output of e-mail.

[0040]First, the adding processing of the new mail form of the telephone 1 is explained using drawing 7 - drawing 9. Drawing 7 is a flow chart of this processing. If turn mail for new mail form to come to hand to the server 5, it transmits by step PA1, and the mail from the server 5 is received by step PA2 and saved in the InBox section 27, in step PA3, it will be judged whether desired mail form is contained in the saved mail. When desired mail form is contained, it progresses to step PA4, when desired mail form is not contained, it returns to step PA1, and operation of Steps PA1-PA3 is repeated until desired mail form is obtained.

[0041]In step PA4, list register operation to the mail form registering part 36 of the obtained mail form is performed. When it judges that it registers by the following step PA5, it progresses to step PA6, and list registration of the mail form is carried out, and processing is ended. When it judges that it does not register by step PA5, processing is ended as it is.

[0042]Drawing 8 is a figure showing the state-of-preservation screen 71 of the InBox section 27. The state-of-preservation screen 71 mainly comprises the data 72 about the reception mail saved in the InBox section 27. The data 72 includes an addresser, a name, receiving time, etc. of e-mail. The register key 73 for specifying list registration of the mail saved in the InBox section 27 as the state-of-preservation screen 71 is contained. If the register key 73 is directed with the input pen 42 which an operator operates, list registration of e-mail will be specified.

[0043]Then, the registration volition confirmation screen 77 as shown in drawing 9 is displayed. The key 79 which denies the key 78 which affirms registration is contained in the registration volition confirmation screen 77. If the affirmation key 78 is directed with the input pen 42, list registration of e-mail will be performed. Thus, the obtained mail form is registered into the mail form registering part 36. It does in this way and two or more mail forms are registered into the mail form registering part 36. The title 74, the up-and-down cursor keys 75 and 76, etc. which show the contents of the InBox section 27 to the state-of-preservation screen 71 are contained.

[0044]Next, the selection process of the mail form of the telephone 1, the executive operation of the script of the telephone 1, transmitting mail processing of the telephone 1, and reply processing of the server 5 are explained using drawing 10 - drawing 20.

[0045]Drawing 10 is a flow chart of selection of the mail form of the telephone 1, execution of a script, and transmitting mail processing. The display of a mail form screen is chosen by step PB1, and desired mail form is chosen by the following step PB2. When it judges that mail form selected by the following step PB3 is performed, it progresses to step PB4, and the data input auxiliary UI implementation part 32 is started, mail form is performed, and processing is ended. When it judges that it does not perform by step PB3, processing is ended as it is.

[0046]Drawing 11 is a figure showing the selection picture 81 of mail form. The selection picture 81 mainly comprises the name 82 of all the mail forms registered into the mail form registering part 36. If the name 82 is directed with the input pen 42 which an operator operates, the mail form which should be performed will be specified. Then, the execution volition confirmation screen 85 as shown in drawing 12 is displayed. The key 87 which denies the key 86 which affirms execution is contained in the execution volition confirmation screen 85. Mail form will be performed if the affirmation key 86 is directed with the input pen 42. The title 83, the scroll key 84, etc. which show a mail form list to the selection picture 81 are contained.

[0047]Drawing 13 is a figure showing the example of the script 91 of the mail form performed.

Drawing 14 is a figure showing the example of the input auxiliary screens 92-95 of data realized by execution of the script 91. The script 91 is prescribed format data which comprises a text which is used with a WWW system, is extended and is defined by the script of browser languages, such as HTML, and a picture. Said data input auxiliary UI implementation part 32 interprets and performs this script 91, and realizes the input auxiliary screens 92-95 for the input auxiliary function using FOMUDAGU defined as said predetermined form by being adapted. Screens 92-95 realized are screens for the data input at the time of a request to print out files of an airline ticket, the prearranged accommodation of a hotel, and a purchase application request to print out files of goods, for example. Screens 92-95 illustrated to drawing 14 are screens for the data input at the time of a purchase application request to print out files of goods.

[0048]The input auxiliary screens 92-95 include a check button, a check box, and a character input box, for example. A check button is chosen by an operator and data is inputted into a check box or a character input box by an operator. The input auxiliary screens 92-95 contain the input guidance displayed by a picture and graphics.

[0049]In Screens 92-95 for the data input at the time of a merchandise purchase application request to print out files of drawing 14, the input guidances 96 are contents to which the purchase of goods is urged, and contents to which the input of a name, an address, a purchase-desired-merchandise name, a number, and the method of paying is urged concretely. The character input box 97 inputs a name and an address. The check box 98 chooses and inputs a purchase-desired-merchandise name and a number. If the check box 98 is specified with the input pen 42, the sub screens 98a and 98b which displayed the trade name list and the number of goods will be displayed. The check button 99 chooses and inputs the method of paying.

[0050]According to the input auxiliary function provided with such an input guidance 96, the character input box 97, the check box 98, and the check button 99, when an operator is unfamiliar to information management systems, such as a personal computer, data input can be performed easily. Therefore, the outstanding alter operation environment can be provided.

[0051]If data input directs concretely the check box 98 for inputting a name and an address with Screen 92 of drawing 14 (A) displayed first, and carrying out the selection input of the trade name, Screen 93 of drawing 14 (B) which has the sub screen 98a will be displayed. The selection input of the trade name is carried out with displayed Screen 93, and if the check box 98 for carrying out the selection input of the number of goods is directed, Screen 94 which has the sub screen 98b of drawing 14 (C) will be displayed. If the selection input of the number of goods is carried out with displayed Screen 94, Screen 95 of drawing 14 (D) will be displayed and the selection input of the method of paying with this screen 95 will be carried out.

[0052]The clear button 100 and the transmission button 101 are displayed on the display screens 92-95. Screens 92-95 are eliminated with the clear button 100, and transmission of the data inputted by the transmission button 101 is specified.

[0053]Drawing 15 is a figure showing the message 105 of optional form. If transmission of input data is specified from said transmission button 101, the optional form message creating section 34 will create the message 105 of optional form, i.e., the form according to the server 5, from the data inputted by the input auxiliary function mentioned above. For example, the message 105 of TSV (Tab Separated Value Format) or CSV (Comma Separated Value Format) form is created. The message 105 created by the generation part 34 is transmitted towards the server 5.

[0054]Drawing 16 is a figure showing the state-of-preservation screen 111 of the OutBox section 29. The state-of-preservation screen 111 is constituted like the state-of-preservation screen 71 of the InBox section 27 mentioned above, and mainly comprises the data 112 about the transmitting mail saved in the OutBox section 29. The data 112 contains a calling destination, a name, dispatch time, etc. of e-mail. The title 113, the up-and-down cursor key 114, 115, etc. which show the contents of the OutBox section 29 to the state-of-preservation screen 111 are contained.

[0055]The mail transmitted from the telephone 1 is given to the client mail server 3 via the wireless public network 2, and is further received by the mail service server 5 via the networks 4, such as the Internet.

[0056]Drawing 17 is a flow chart of the reply script generation processing of the mail service server 5 which received the mail from the telephone 1. In step SA1, the mail server supervisory

control part 61 checks the mail address of a sending person and an addressee to reception mail. This check is accomplished based on the data memorized by the transceiver person Management Department 66. If it is judged by the following step SA2 that a mail address is normal, it will progress to step SA4, and if it is judged that it is unusual, it will progress to step SA3, error handling will be performed, and this processing will be ended.

[0057]In step SA4, the message analysis section 65 analyzes the message of reception mail. In the following step SA5, it is judged whether it is a message of the form which the message of reception mail can interpret by the mail service server 5 concerned based on the result of analysis. When it is the form which can be interpreted, it progresses to step SA7, and when it is the form which cannot be interpreted, it progresses to step SA6, reception of e-mail is usually performed, and this processing is ended.

[0058]In step SA7, it is judged whether a reply script needs to be generated. When required, it progresses to step SA9, and when unnecessary, it progresses to step SA8. In step SA8, the reply usual mail is created and it progresses to step SA10. In step SA9, the script message creating section 62 generates a reply script. In the following step SA10, from the created usual mail or a reply script, the reply mail preparing part 63 creates reply mail, transmits, and processing is ended.

[0059]Drawing 18 is a figure showing the example of the reply script 121 generated by the script message creating section 62. The reply script 121 analyzes the reception mail from the telephone 1, is created, and is data of form according to the telephone 1. The reply script 121 is prescribed format data which is said script 91 and a highly uniform and which comprises a text which is used with a WWW system, is extended and is defined by the script of browser languages, such as HTML, and a picture concretely. The telephone 1 creates send data in consideration of the form of the reply script created by the server 5. Therefore, creation of the reply script 121 is easy for the server 5 which received such data.

[0060]The mail transmitted from the mail service server 5 is given to the client mail server 3 via the networks 4, such as the Internet, and is further received by the telephone 1 via the wireless public network 2.

[0061]The received script 121 is analyzed in the script-analysis part 31, it performs by the data input auxiliary UI implementation part 32, and the input auxiliary screen 125 of data as shown in drawing 19 is realized. Being able to check order data with Screen 125, an operator performs the volition display of seeing and placing an order for these contents which lends and is not. In Screen 125, the input guidances 126 are the contents of a check of order data, and contents to which the volition display of an order is urged concretely. The check button 127 chooses and inputs the volition display of an order.

[0062]The state-of-preservation screen 130 of the InBox section 27 of the telephone 1 which received such a script 121 seems to be drawing 20. Mail of said script 121 is saved as the data 72 about the reception mail saved in the InBox section 27 which constitutes the state-of-preservation screen 130.

[0063]Next, automatic execution processing of the script of the telephone 1 is explained using drawing 21 and drawing 22. Drawing 21 is a flow chart of this processing. If e-mail is received by step RA1, it will progress to step RA2 and the mail address of a sending person and an addressee will be checked. If it is judged by the following step RA3 that a mail address is normal, it will progress to step RA4, and if it is judged that it is unusual, it will progress to step RA5, error handling will be performed, and this processing will be ended.

[0064]The message of reception mail is analyzed in step RA4. In the following step RA6, it is judged whether the message of reception mail is a script message based on the result of analysis. When it is a script message, it progresses to step RA8, when it is not a script message, it progresses to step RA7 and reception of e-mail is usually performed, and this processing is ended.

[0065]In step RA8, it is judged whether it is set up so that the data input auxiliary UI automatic start part 33 may start. This setting out is performed by the screen 135 as shown in drawing 22. it comes out with the button 136 which chooses whether the data input auxiliary UI automatic start part 33 when the mail corresponding to form is received is started automatically, the button 137 which sets up whether the selected automatic start is performed, and the button (it returns)

138 which eliminates this screen 135, and Screen 135 is constituted. When set up start with the button 136,137, it progresses to step RA10, and when not set up, it progresses to step RA9, and this processing is ended after incorporating and saving received data in the InBox section 27.

[0066]In step RA10, received data are incorporated into the InBox section 27, and are saved. In the following step RA11, the data input auxiliary UI implementation part 32 is started, and an input auxiliary screen which was mentioned above is formed. If data is inputted by the realized input auxiliary screen by the following step RA12, The message of the optional form which performed transmitting processing by step RA13, created the message of optional form by step RA14, and was created by step RA15 is transmitted as a mail text, it registers with the OutBox section 29 as sending end mail by step RA16, and this processing is ended.

[0067]Next, the erasing processing of mail form is explained using drawing 23 - drawing 25. Drawing 23 is a flow chart of this processing. If unnecessary mail form is chosen from the displayed mail form list by step PC1 and erasing operation is performed by the following step PC2, the volition of elimination will be checked in step PC3. When eliminating the mail form chosen by step PC4 when eliminating and it is not eliminated [end processing and], processing is ended as it is.

[0068]Drawing 24 is a figure showing the display screen 140 of a mail form list. Screen 140 comprises the elimination designation button 143 and the scroll key 144 of the title 142 and mail form which show the list 141 of mail form, and a mail form list. An operator chooses unnecessary mail form out of the displayed list 141, and performs erasing operation which directs the elimination designation button 143. The selected mail form is displayed in white, for example, and is displayed.

[0069]Drawing 25 is Screen 145 for the elimination volition check displayed after erasing operation. An operator chooses and specifies the button 146 which affirms elimination execution, when there is volition of elimination, and when there is no volition of elimination, it chooses and specifies the button 147 which denies elimination execution.

[0070]In the telephone 1 which is a communication apparatus of this gestalt as mentioned above, data is inputted by the specific input auxiliary function realized by analyzing and performing the script received from the server 5. From the inputted data, the data of form according to the server 5 is created and transmitted. Therefore, the server 5 which received this data can create the reply data to received data easily.

[0071]An input auxiliary function is an input auxiliary function using FOMUDAGU defined as a predetermined form by being adapted, and said predetermined form is a form which comprises a text which is used with a WWW system, is extended and is defined by the script of a browser language, and a picture. Therefore, data can be easily inputted by selection of the realized check button, or the data input to the check box and character input box which were realized. Data input is supportable by pictures and graphics, such as a realized input guidance.

[0072]Two or more scripts for realizing an input auxiliary function are stored, and any one script is performed selectively. Therefore, the function which the operator in the input auxiliary function which was adapted for conditions, such as a request to print out files of an airline ticket, prearranged accommodation of a hotel, and a purchase application request to print out files (on-line shopping) of goods, respectively, for example desires can be realized selectively, and high convenience is acquired. Since the stored script is eliminable, an unnecessary script can be eliminated and a storage capacity can be used effectively. It can prevent making a mistake in an unnecessary input auxiliary function, and realizing by eliminating an unnecessary script.

[0073]Reception of the script from the server 5 will realize an input auxiliary function automatically. Therefore, the operator does not need to give directions of realization of an input auxiliary function, and can acquire high convenience.

[0074]Although this gestalt explained the example of the telephone 1 and communications system which are communication apparatus, the medium which recorded the communication processing program for performing an operation step which was mentioned above to the computer of the telephone 1 also belongs to the range of this invention.

[0075]

[Effect of the Invention]Since the data of form according to a server is created and it was made

to transmit from the data inputted by the realized specific input auxiliary function when following this invention as mentioned above, in the server which received such data, creation of reply data becomes easy.

[0076]When following this invention, in the communication apparatus, the input auxiliary function using FOMUDAGU defined as a predetermined form by being adapted was realized. Said predetermined form is a form which comprises a text which is used with a WWW system, is extended and is defined by the script of a browser language, and a picture. Therefore, data can be easily inputted by selection of the check button realized, for example, or the data input to the check box and character input box which were realized, Data input is supportable by pictures and graphics, such as a realized input guidance.

[0077]If this invention is followed, the server which received the data transmitted from the communication apparatus will answer this, and will transmit reply data. Said communication apparatus receives this reply data. Thus, communication with a communication apparatus and a server is realizable.

[0078]If this invention is followed, a server will transmit the script for realizing said specific input auxiliary function. Said communication apparatus receives and analyzes a script and realizes an input auxiliary function based on an analysis result. Thus, an input auxiliary function with easy data input is realizable.

[0079]If this invention is followed, a communication apparatus will store two or more received scripts, and will choose any one, and the input auxiliary function in the selected script will be realized. Therefore, the input auxiliary function which was adapted for conditions, such as a request to print out files of an airline ticket, prearranged accommodation of a hotel, and a purchase application request to print out files (on-line shopping) of goods, respectively, for example can be realized selectively, and high convenience can be acquired.

[0080]If this invention is followed, by eliminating the unnecessary script of two or more scripts stored in the communication apparatus, effective use of a storage capacity is attained and it can prevent making a mistake in an unnecessary input auxiliary function, and realizing.

[0081]If this invention is followed, and a script is received, an input auxiliary function will be realized automatically. Therefore, the operator does not need to give directions of realization of an input auxiliary function, and high convenience is acquired.

[0082]If this invention is followed, in order to make a communication apparatus perform the step which transmits the step which realizes a specific input auxiliary function, the step which creates the data of form according to a server from the data inputted by the realized input auxiliary function, and the created data, The medium which recorded the communication processing program can be provided.

[0083]A communication apparatus which creates the data of form according to a server from the data which realized the specific input auxiliary function and was inputted by the realized input auxiliary function when following this invention, and transmits to a server, At the time of the data receiving from a communication apparatus, the received data can be analyzed and the communications system which comprises a server which creates and replies the data of form according to a communication apparatus can be realized.

[Translation done.]